

WHAT IS CLAIMED IS:

1. A display, comprising:

pixels provided at intersections of a first set of lines and a second set of lines, the pixels including respective current-driven electro-optic devices;

driver circuits which drive control the pixels through the first set of lines during a drive controllable period during which the pixels are drive controllable according to voltage states of the second set of lines; and

a single constant current source,

wherein

the driver circuits generate a drive current to current drive the electro-optic devices and pass the drive current to the pixels through the first set of lines during the drive controllable period so as to drive control the pixels; create, and maintain, a circuit state where the drive current flows through the driver circuits to the pixels, using a constant current output from the constant current source during a non-drive controllable period; and generate the drive current during the drive controllable period in the maintained circuit state.

2. The display as set forth in claim 1, wherein

a current drive period during which the drive current

flows through the electro-optic devices has a duration determined by a selective combination of periods in a constant period.

3. The display as set forth in claim 1, wherein

the pixels each include:

a first active device which generates and passes the drive current to the electro-optic devices when the electro-optic devices are current driven;

a first capacitor which maintains conditions of a voltage applied to the first active device so as to cause the first active device to generate, when the electro-optic devices are current driven, the drive current passed from an associated one of the driver circuits during the drive controllable period;

a second active device which, during the drive controllable period, conducts and passes the drive current from the associated driver circuit to the first active device so as to cause the first active device to create the conditions and which, after the conditions are created, does not conduct so as to cause the first capacitor to maintain the conditions; and

a first switching device which conducts to connect the pixels to the first set of lines, starts the drive controllable period, and causes the first capacitor to

maintain the conditions by the first capacitor.

4. The display as set forth in claim 3, further comprising a third set of lines which pass, through the conducting second active device rather than the first switching device to the first active device, a voltage required for the first active device to create the conditions,

wherein the first switching device conducts so as to connect the first set of lines to a current output terminal of the first active device.

5. The display as set forth in claim 3, further comprising a fourth set of lines which pass, to the first switching device, a voltage switching the first switching device between a conducting state and a non-conducting state.

6. The display as set forth in claim 3, wherein the pixels each further include a second switching device which opens/closes a path for the drive current to flow from the first active device to the associated one of the electro-optic devices.

7. A display, comprising driver circuits which drive control pixels provided at intersections of a first set of lines and a second set of lines, the pixels including respective

current-driven electro-optic devices, through the first set of lines during a drive controllable period during which the pixels are drive controllable according to voltage states of the second set of lines, the driver circuits generating a drive current to current drive the electro-optic devices and passing the drive current to the pixels through the first set of lines during the drive controllable period, so as to drive control the pixels,

wherein

the driver circuits create, and maintain, a circuit state where the drive current flows through the driver circuits to the pixels, using a constant current output from a single constant current source during a non-drive controllable period; and generate the drive current during the drive controllable period in the maintained circuit state.

8. A display, comprising:

electro-optic devices provided at intersections of a first set of lines and a second set of lines;

first active devices provided in series with the electro-optic devices;

first capacitors connected to control terminals of the first active devices;

second active devices provided between the first set of

lines and the first capacitors;

first switching devices provided between the first set of lines and current output terminals of the first active devices; and

a fourth set of lines connected to control terminals of the first switching devices.

9. A display, comprising:

electro-optic devices provided at intersections of a first set of lines and a second set of lines;

a third set of lines provided in parallel with the first set of lines;

first active devices provided in series with the electro-optic devices;

first capacitors connected to control terminals of the first active devices;

second active devices provided between the third set of lines and the first capacitors; and

first switching devices provided between the first set of lines and current output terminals of the first active devices.

10. The display as set forth in claim 8, further comprising second switching devices provided between the electro-optic devices and the first active devices.

11. The display as set forth in claim 9, further comprising second switching devices provided between the electro-optic devices and the first active devices.
12. The display as set forth in claim 10, wherein the fourth set of lines is connected to control terminals of the second switching devices.
13. The display as set forth in claim 11, further comprising a fourth set of lines connected to control terminals of the second switching devices.
14. The display as set forth in claim 9, further comprising:  
second capacitors connected to the third set of lines;  
third switching devices provided between the third set of lines and a first set of voltage lines;  
fourth switching devices provided between the second capacitors and the first set of lines, the fourth switching devices being opposite to the third set of lines with respect to the second capacitors; and  
fifth switching devices provided between the second capacitors and a second set of voltage lines, the fifth switching devices being opposite to the third set of lines with respect to the second capacitors.